

The logo for Consumers Energy, featuring the company name in a blue, italicized sans-serif font. A green swoosh underline is positioned beneath the text, starting under 'Consumers' and ending under 'Energy'.

Consumers Energy

Count on Us

SENATE ENERGY & TECHNOLOGY COMMITTEE

Nancy Popa – Director of Renewable Energy

Clean & Efficient Energy Act (SB 438)

Aug. 26, 2015

Good morning Chairman Nofs, Vice Chair Proos, Vice Chair Hopgood and honorable committee members. My name is Nancy Popa and I am the Director of Renewable Energy at Consumers Energy. I am responsible for overseeing our renewable energy strategy, compliance with PA 295 and development and implementation of customer renewable energy programs.

I am here today to testify in support of Senate Bill 438. Thank you for your time and willingness to listen and learn more about our renewable energy programs. I appreciate the opportunity to discuss Michigan's energy future.

I will begin this morning by discussing the progress of energy waste reduction and renewable energy in our state, and then explain net metering and the potential effects of inaction.

Energy Waste Reduction and Renewable Energy

Energy waste reduction is a success story for Michigan. Consumers Energy's programs are saving our customers money and employing a large network of contractors and suppliers, while contributing toward a sustainable energy future. For example, our programs have helped business and residential customers save \$855 million since 2009; we estimate that our customers will save more than \$2 billion over the life of the programs. And through energy waste reduction programs that offer rebates for upgrading to more efficient lighting, heating, ventilation and cooling (HVAC) equipment, we are on track to help customers reduce electric use by nearly 6 percent since the program's inception.

Like energy waste reduction, renewable energy has also been a success story for Michigan. Consumers Energy has approximately 900 megawatts of renewable energy produced by wind, hydro, biomass, landfill gas and solar. We proudly met the renewable portfolio capacity requirement one year earlier than required through investing almost \$500 million in two wind farms and entering into 15 power purchase agreements with Michigan renewable energy providers. As the costs of renewable resources continue to decline and the Clean Air Act section 111d is implemented, we fully expect renewables to be an important part of our diverse and reliable energy mix.

In fact, we have a new voluntary solar program – called Solar Gardens – under development that will make solar energy available to all of our full-service electric customers, even those who don't own a home or have a sunny rooftop. Our 10 megawatt Solar Gardens program, launching this fall, has the potential to double Consumers Energy's solar capacity.

We have a good track record of success, and Consumers Energy is committed to continued support of energy waste reduction and increased renewable energy, as long as that remains in the best interest of all customers, Michigan's economy and the environment.

A Look at Net Metering

Distributed generation (DG) refers to energy generated on-site, most often through rooftop solar panels. In Michigan, net metering allows DG customers to receive credit for the energy they produce and sell excess power back through the grid at the full retail rate.

Net metering billing was adopted in some states as early as the 1990s, and spread further across the US to incent the development of solar energy. Congress further supported solar investments by enacting a 30 percent Investment Tax Credit in 2006. Today, 645,000 American homes and businesses generate solar energy, and costs have declined nearly 65 percent since 2006.

Consumers Energy's net metering program began in 2009, and we have about 400 enrolled customers self-generating with primarily solar, and some wind energy. Today, the enrolled capacity is only about 5 percent of the program cap (0.5 percent of peak load).

Net metering has been successful in accomplishing the goals of the day, but as solar energy gains popularity, we must address the issues at hand. Going forward, our biggest concern is ensuring all customers are treated fairly.

We have every intention of continuing to support customer renewable programs and Michigan solar, and encourage the Legislature to consider grandfathering in those customers who have already made the investment in self-generation as part of the net metering program.

The Challenges of Net Metering Today

I know you heard in testimony last week that there are no subsidies with net metering. That is a false statement. Let me provide you the facts: **net metering customers are being paid far more than their actual electric generation is worth and avoiding 2/3 of the costs of their energy bill – unfairly shifting that cost onto traditional utility distribution customers.**

The retail rate of energy is approximately 15 cents/kWh. That cost is broken down by:

- 10 cents for fixed costs — generating plants, poles, wires and substations
- 5 cents for the energy itself

While a net metering customer's energy use is offset by their own generation, they are still relying on the electric grid 24 hours per day. When the rooftop solar system is generating electricity, it is either being supplemented with utility-provided services or it is sending excess electricity back through the grid. There is virtually never a point in time where the solar system is meeting the exact demand of the household. **Rooftop solar customers are using utility services 24 hours a day – just like any other customer – but they are avoiding the costs of maintaining the grid. If we don't change this policy now, it will hurt our customers down the road.**

In Michigan, true net metering is currently capped at half a percent of total utility load. If fully subscribed, this would represent a subsidy of more than \$250 million being paid by non-participating customers in Michigan over the 25-year life of the system. **This is simply an issue of fairness for all customers.**

Impact of Senate Bill 438

As solar energy continues to grow in Michigan, we must take this opportunity to update our net metering policy and ensure all customers are treated fairly – meaning rooftop solar customers receive fair compensation for the energy they produce and pay their fair share of the costs to maintain the grid they rely on. Senate Bill 438 ensures customers who don't own solar panels are not burdened by a policy of subsidization.

Closing

In closing, I'd like to address last week's testimony from out-of-state solar companies promoting the concept of minimum bills. We appreciate the idea of collecting a minimum amount to help with costs of maintaining the grid, but a minimum bill isn't designed to collect the full costs of delivery and standby capacity that is always ready to serve a distributed generation customer. Typically, minimum bills cover administrative costs such as billing and meters, and at \$7-12 are only a fraction of fixed costs.

For an average customer, the minimum bill to recover distribution system costs would have to be about \$65/month. Policymakers need to weigh the pros and cons of minimum bills, as they would likely create winners and losers if applied to everyone as the representatives from The Alliance for Solar Choice suggested.

The net metering provision in Senate Bill 438 is a good approach for Michigan's next energy policy, as it supports a sustainable energy future for our state while ensuring fairness for all customers.

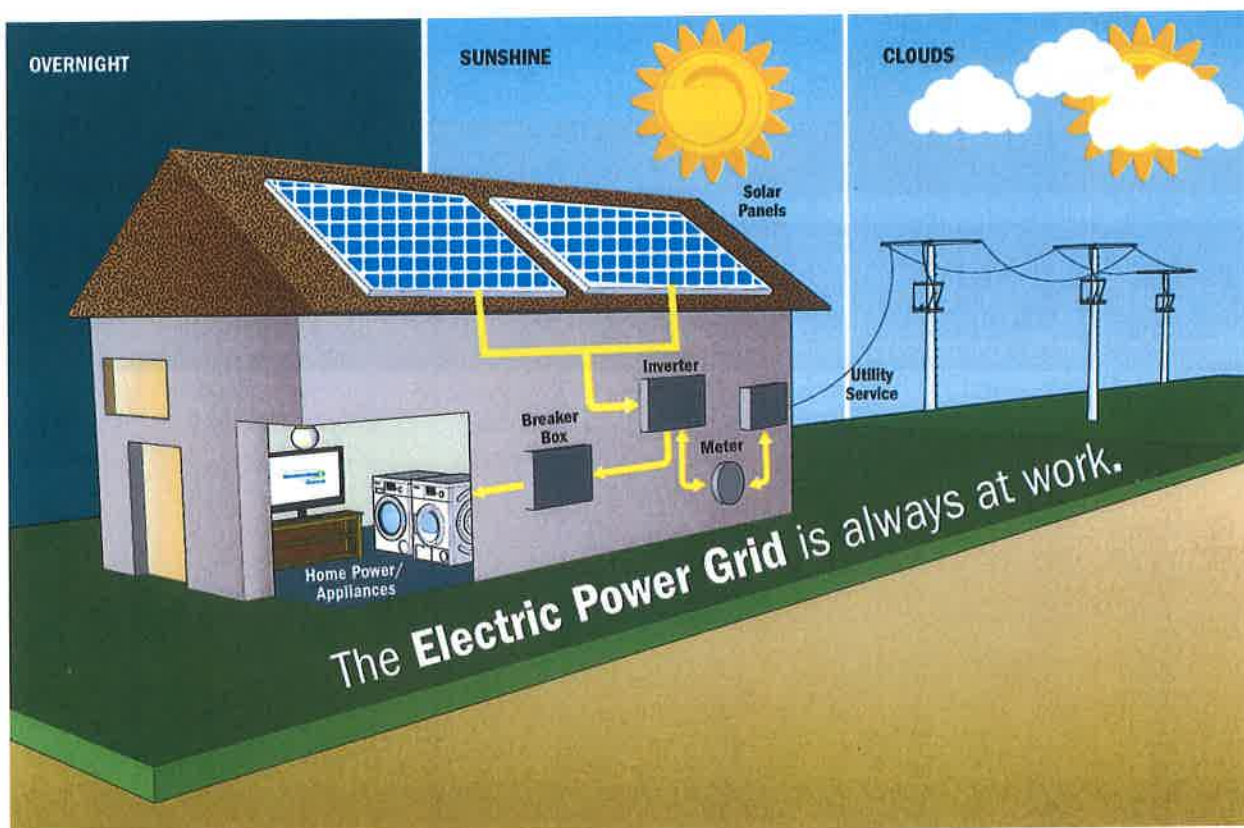
Thank you for listening, I'd be happy to take any questions you may have.

NET METERING AND SOLAR ENERGY IN MICHIGAN

Distributed generation (DG) refers to energy generated on-site, most often through rooftop solar panels. In Michigan, net metering allows DG customers to receive credit for the energy they produce and sell excess power back through the grid at the full *retail* rate. This is unfair for traditional utility customers – it's time for Michigan to re-evaluate net metering.

Even though customers with solar panels produce some of their own power, they still rely on the grid:

- **Utilities deliver power to rooftop solar customers when the sun isn't shining**, like at night or on cloudy days; and
- **Even on sunny days, there are often moments when utilities provide electricity through the grid to support the start and cycling of large appliances** – on a hot summer day, a typical Michigan air conditioner turns on 3-6 times an hour, meaning that rooftop solar customers may use the grid even during the sunniest days.
- **When the sun is shining its brightest** and the rooftop system is generating power above the household's own demand, **the customer sends that power back onto the grid.**



Even though all customers rely on the grid, **as a result of net metering, the fixed costs of the electric grid are not fully paid by net metering customers.** Today, net metering allows rooftop solar customers to receive credit for the energy they produce and excess power at the full retail rate (~\$0.15/kWh). Within that 15 cent/kWh rate, about 10 cents accounts for fixed costs such as generating plants, poles, wires and substations. The remaining 5 cents represents the cost for the energy itself.

That means net metering customers are being credited for the excess energy they produce, for far more than their generation is actually worth, and avoid paying 2/3 of their energy bill.

MONTHLY BILL EXAMPLE				
	\$/KWH	TRADITIONAL CUSTOMERS	NET METERING CUSTOMERS	COSTS WITH SB 438
Energy Costs	\$0.05	\$33	\$7	\$33
Fixed Costs	\$0.10	\$65	\$14	\$65
SB 438 Credit	\$0.05	0	0	(\$26)
TOTAL		\$98	\$21	\$72

Senate Bill 438 is a good start at net metering reform because it supports a sustainable energy future for Michigan while ensuring fairness for all of our customers.